eggs, nymphs or larvae. The small size makes it easily transportable and affords use of separate cartons for each locality. The tin screw-cap lid is not easily dislodged and ink notations can be made upon it and later rubbed off. For absorbing fecal material of *Triatoma*, double paper toweling discs to cover the bottom and an upright accordian-pleated piece of toweling are placed in each carton.

Loss of bugs in transit during extremely hot, summer weather is reduced if the cartons are placed in a hardware cloth basket and covered with wet cloths.

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METHODS OF COLLECTING AND MARKING LARGE NUMBERS OF BEETLES.

By R. W. WILLIAMS, Urbana, Ill.

During the summer of 1940 I had the opportunity to study some of the habits of the common milkweed beetle, *Tetraopes tetrophthalmus* (Forst.). In the course of this study I found it desirable to collect large numbers of the adult beetles in the field, bring them into the laboratory, mark them and return them to the same patch of milkweed.

In collecting a large number of these insects I soon learned that it was disastrous, both to my experiment and to the beetles, to confine a large number of active adults in too small a space, for they vigorously attacked each other with their mandibles and many suffered the loss of legs and antennae. To prevent injury of this nature two procedures were followed: (1) Overcrowded conditions were avoided by placing not more than ten beetles in each of several pint fruit jars containing strips of towel paper. This method proved to be rather cumbersome and awkward, but the results were very satisfactory. (2) The beetles were cooled to such a point that they became inactive. A thermos bottle was filled with ice and water after which a large test tube, the same length as the interior of the

bottle and the same diameter as the neck of the bottle, was placed into it. The insects were placed in the dry tube surrounded by the ice, the tube corked and the bottle sealed. Because of the decrease in the temperature and consequently metabolic rate, the insects soon became motionless. The later method had two decided advantages over the former. First a small size thermos bottle, which conveniently held 200 beetles, was much more portable than twenty pint jars, and second the beetles could not attempt to escape while marking and consequently there was no danger of any wandering off into the room.

Baer Brothers M Bronzing Liquid with Bruin Brand Pigments were used in marking the beetles. A gold dot on the anterior half of an elytron signified the number one, on the posterior half the number two. A green dot in the same locations represented the numbers three and four; silver, five and six; blue, seven and eight; and purple, nine and zero. In this manner the beetles could be numbered consecutively up to one hundred. The second hundred was done in the same manner with the addition of a gold dot on the prothorax, the third hundred had a green dot on the prothorax, etc., with the other colors in sequence named above. By this method of marking each individual had its own number and could be recognized as an individual in the field. These marks were quite interpretable three weeks later and I believe they would still have been so after being exposed to the elements a week or two more.

A NEW SPECIES OF PTERODONTIA (DIPTERA, ACROCERIDAE).

By Geo. Steyskal, Detroit, Mich.

Pterodontia flavoscutellata, n. sp.

Body black, covered with black pile, the following parts yellow: scutellum, abdomen except the first and second tergites and a square area occupying the whole length of the third segment, front femora and all tibiae and tarsi. The venter is pitchy black. Length of body, also wings, 9 mm.

Holotype, male, State Game Refuge, Iosco County, Mich., July 23, 1935 (A. L. Olson—L. K. Gloyd), in Univ. Mich. Mus. Zool. This form is mentioned as an unnamed variety of *P. misella* O. S. in Cole's Revision but it seems desirable to consider it a distinct

species until more is known about it.